General Services Administration
Caribbean Property Management Center

Federico Degetau Federal Office Building & Clemente Ruiz Nazario Courthouse PR0017ZZ

150 Chardon Ave., Hato Rey, Puerto Rico

Post-Earthquake Assessment

January 28, 2020

General Services Administration
Caribbean Property Management Center
150 Carlos Chardon Ave., Room 359
Hato Rey, PR 00918

Attention: Eng. Karin Reed, Project Manager
Ms. Olga Rodriguez, Contracting Officer

Submitted By:

RMA ARCHITECTS, P.S.C.
P.O. BOX 10992 CAPARRA HEIGHTS STATION
SAN JUAN, PUERTO RICO 00922-0992
T. 787-749-1960, T. 787-749-1965

Post-Earthquake Facility Assessment
for GSA Facilities in Puerto Rico

Project Name: **Puerto Rico Post-Earthquake Federal Facility Assessment**

Project Number: TBD

Region: Northeast and Caribbean (02) - Design & Construction Division

Building Name: Multiple Buildings

Building Addresses: 300 Recinto Sur Street, San Juan;
150 Chardon Ave., Hato Rey; 651 Federal Drive,
Guaynabo

Building Numbers: PR0003ZZ, PR0017ZZ, PR0023ZZ, PR0024ZZ and PR00521FP

Name	Year Built	Stories	GSF	Construction
Toledo	1914 & 1940	4+ Basement 7+ Basement	128,715	(b)(5)
Degetau	1974	7+ Basement	441,750	
Ruiz Nazario	1974	2		
Child Care	2000 & 2004	1	±19,180 (footprint)	
Parking Garage	2009 *	4	170,532	
GSA Center	1941	1	85,639	

Executive Summary

Following the seismic events of January 7, 2020, the U.S. General Services Agency (GSA) requested Architectural and Engineering (A/E) services to provide Post Earthquake Assessment of GSA Federal Buildings in Puerto Rico. Multiple teams of qualified structural engineers were organized to expedite the work during January 13 through January 15, 2020. GSA- SME Subject Matter Expert, Eng. William Earl accompanied the teams in the performance of the series of assessments. Available documents were provided by GSA prior to the visit for review and are detailed in the report.

Project Scope

The AE is to provide qualified inspection teams to perform the Detailed Evaluation Method for the multiple buildings listed herein in accordance with the current edition of Applied Technology Council ATC-20: "Procedures for Post-earthquake Safety Evaluation of Buildings". https://www.atcouncil.orgiatc-20

Deliverable 1 shall consist of:

1. Completed standardized forms included in ATC-20 for each building;
2. An executive summary of the observations and safety assessment for each building.

Deliverable 2 shall consist of a letter report of the observations and safety assessment for each building including descriptions and photographs of any observed safety conditions and key plans indicating locations.

Methodology

Multiple teams of qualified structural engineers were organized to expedite the work during January 13 through January 15, 2020. Teams are detailed and date of site visits listed in the Schedule of work in the table below.

DATE	TIME	ID	Name	Year Built	Stories	GSF	Professional -1		Professional-2		Professional-3		RMA POC-CEL	GSA BLOG MANAGER	
Monday 1/13/2020	8-8:30		Kick off meeting												
	8:30	PR0003ZZ	Jose V. Toledo U.S. Post Office and U.S. Courthouse	1914 1940	4 + basement 7 + basement	129,715.00	Eng. William Earl GSA SME 817-825-6237	X	Eng. Arturo Beale-POC RMA Structural Team Leader	X			(b) (6)	JOSE RAMOS	787-407-9852
	8:30	PR0023ZZ	Child Care Center	2000 2004	Original Annex	±19,180.00 (footprint)			Eng. Luis Daza		Myrene Giuliani-POC	X		FRANCISCO MARTINEZ	787-403-9483
	1:00	PR0024ZZ	Parking Garage	2009	4	170,532.00			Eng. Luis Daza		Myrene Giuliani-POC	X		FRANCISCO MARTINEZ	787-403-9483
	5:00		Wrap up call												
Tuesday 1/14/2020	8:00	PR0017ZZ	Ruiz Nazario	1974	2	441,750.00	Eng. William Earl	X	Eng. Arturo Beale-POC	X	Eng. Manuel Vidal			FRANCISCO MARTINEZ	787-403-9483
		PR0017ZZ	Federico Degetau	1974	7 + basement		Eng. William Earl	X	Eng. Arturo Beale-POC	X	Eng. Manuel Vidal			FRANCISCO MARTINEZ	787-403-9483
	5:00		Wrap up call												
Wednesday 1/15/2020	10:00	PR00521FP	GSA Center	1941	1	85,639.00	Eng. William Earl		Eng. Monica Santos	X	Cristina Algaze-POC	X		WILLIAM PAGAN	917-715-5217
	12:00		Wrap up call												
CALL IN NUMBER: (b) PASSCODE (b)															

GSA Documents

GSA provided available documentation of each building and all known conditions of the facilities. Building Managers provided the support to the team in providing logistics of access to the team additional printed drawings and their knowledge of the building conditions. Information received is as follows:

2018 Seismic Assessment by Andrew Altamirano, PE
2003 Clemente Ruiz Nazario U.S. Courthouse Seismic Hazard evaluation
Gp4 drawings

Building Background Information

Federico Degetau Federal Office Building and Ruiz Nazario US Courthouse were designed in the late 1969 and constructed in the 1970 by O' Kelly, Mendez & Brunner and Smith, Korach and Associates.

Federico Degetau is a seven story and (b)(5) [redacted]. The Clemente Ruiz Nazario Building is a two story concrete structure consisting of (b)(5) [redacted]

The 2018 report indicates this building was designed prior to seismic codes. 2018 Seismic Assessment states previous studies were performed to the building and are as follows:

2003- Seismic hazard evaluation performed by ABS Consulting
2017- Seismic evaluation by Thornton Tomasetti
2018- Seismic evaluation by Thornton Tomasetti

As to the date of this report GSA informed there has been no improvements to the building reported as part of the seismic reinforcement findings

Findings

The seismic evaluation performed has been of an ocular nature with the sole purpose of detecting visible damages with the structure experienced as a result of the earthquake of January 7, 2020 and the corresponding aftershocks to the date inspected. It does not address compliance with the current building codes in effect for Puerto Rico (IBC 2018) nor damages

caused by other lateral loads causing events, soil conditions or any other events.

No structural damage related to recent seismic events were found at the subject facility. For additional observations, see the attached documentation.

ATC-20 Detailed Evaluation Safety Assessment Form

Inspection

Inspector ID: MANUEL A. VIDAL

Affiliation: CONSULTING ENGINEER TO GSA

Inspection date and time: 8:00 AM 01/14/2020 ☒ AM ☒ PM

Final Posting
from page 2

- ☒ Inspected
- ☐ Restricted Use
- ☐ Unsafe

Building Description

Building name: FEDERICO DEGETAU FED. OFF. BLD

Address: 150 CARLOS F. CHARDON AV.
HATO REY, P.R. 00918-1703

Building contact/phone: FRANCISCO MARTINEZ (b) (6)

Number of stories above ground: 7 below ground: —

Approx. "Footprint area" (square feet): 941,000

Number of residential units: —

Number of residential units not habitable: —

Type of Construction

(b)(5)

Primary Occupancy

- ☐ Dwelling
- ☐ Other residential
- ☐ Public assembly
- ☐ Emergency services
- ☐ Commercial
- ☐ Offices
- ☐ Industrial
- ☐ Other: _____
- ☒ Government
- ☐ Historic
- ☐ School

Evaluation

Investigate the building for the conditions below and check the appropriate column. There is room on the second page for a sketch.

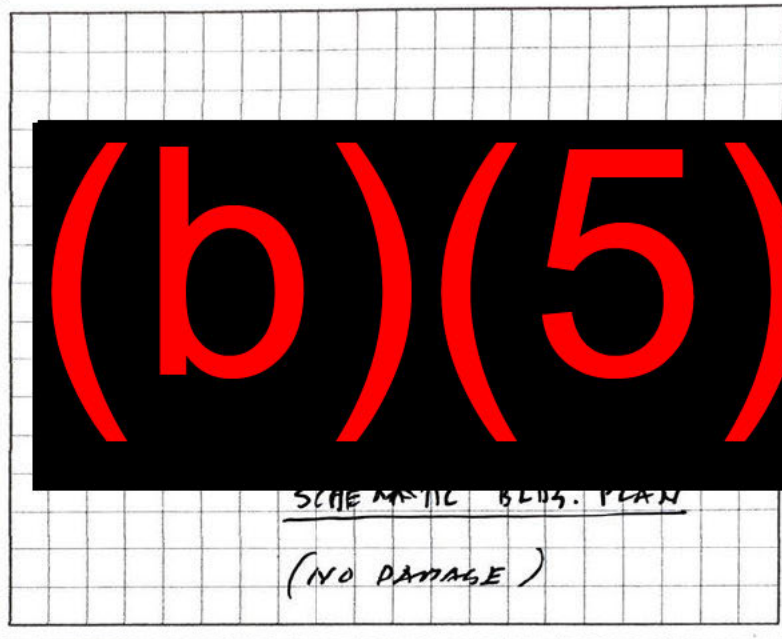
	Minor/None	Moderate	Severe	Comments
Overall hazards:				
Collapse or partial collapse	☒	☐	☐	
Building or story leaning	☒	☐	☐	
Other _____	☐	☐	☐	
Structural hazards:				
Foundations	☒	☐	☐	
Roofs, floors (vertical loads)	☒	☐	☐	
Columns, pilasters, corbels	☒	☐	☐	
Diaphragms, horizontal bracing	☒	☐	☐	
Walls, vertical bracing	☒	☐	☐	
Precast connections	☒	☐	☐	
Other _____	☐	☐	☐	
Nonstructural hazards:				
Parapets, ornamentation	☒	☐	☐	
Cladding, glazing	☒	☐	☐	
Ceilings, light fixtures	☒	☐	☐	
Interior walls, partitions	☒	☐	☐	
Elevators	☒	☐	☐	
Stairs, exits	☒	☐	☐	
Electric, gas	☒	☐	☐	
Other _____	☐	☐	☐	
Geotechnical hazards:				
Slope failure, debris	☒	☐	☐	
Ground movement, fissures	☒	☐	☐	
Other _____	☐	☐	☐	

General Comments: _____

Continu

Building name: FEDERICO DEGETAU FEDERAL OFFICE BLDG. Inspector ID: MANUEL A. VIDAL

Sketch (optional)
Provide a sketch of the building or damaged portions. Indicate damage points.



Estimated Building Damage
If requested by the jurisdiction, estimate building damage (repair cost ÷ replacement cost, excluding contents).

- [x] None
- [ ] 0–1%
- [ ] 1–10%
- [ ] 10–30%
- [ ] 30–60%
- [ ] 60–100%
- [ ] 100%

Posting
If there is an existing posting from a previous evaluation, check the appropriate box. MANUEL A. VIDAL

Previous posting: [x] INSPECTED [ ] RESTRICTED USE [ ] UNSAFE Inspector ID: _____ Date: 1/14/20

If necessary, revise the posting based on the new evaluation and team judgment. *Severe* conditions endangering the overall building are grounds for an Unsafe posting. Local *Severe* and overall *Moderate* conditions may allow a Restricted Use posting. Indicate the current posting below and at the top of page one.

[x] **INSPECTED** (Green placard) [ ] **RESTRICTED USE** (Yellow placard) [ ] **UNSAFE** (Red placard)

Record any use and entry restrictions exactly as written on placard: _____

Further Actions Check the boxes below only if further actions are needed.

- [ ] Barricades needed in the following areas: _____
- [ ] Engineering Evaluation recommended: [ ] Structural [ ] Geotechnical [ ] Other: _____
- [ ] Other recommendations: _____

Comments: _____

ATC-20 Detailed Evaluation Safety Assessment Form

Inspection

Inspector ID: ARTURO BEALE, P.E. (b) (6)

Affiliation: GSA CONSULTANT / RMA GROUP

Inspection date and time: JANUARY 14, 2020 ☒ AM ☒ PM

Final Posting
from page 2

- ☒ Inspected
- ☐ Restricted Use
- ☐ Unsafe

Building Description

Building name: RUIZ HANSEN BLDG

Address: CALLE CHARLOTTE AMALIE

HATO REY, P.R. 00918-1703

Building contact/phone: ARTURO BEALE (b) (6)

Number of stories above ground: 1 below ground: 1

Approx. "Footprint area" (square feet): 80,000 SF

Number of residential units: NA

Number of residential units not habitable: NA

Type of Construction

- ☐ Wood frame
- ☑ Steel frame
- ☐ Tilt-up concrete
- ☑ Concrete frame
- ☒ Concrete shear wall
- ☐ Unreinforced masonry
- ☐ Reinforced masonry
- ☐ Other: _____

Primary Occupancy

- ☐ Dwelling
- ☐ Other residential
- ☐ Public assembly
- ☐ Emergency services
- ☐ Commercial
- ☐ Offices
- ☐ Industrial
- ☐ Other: _____
- ☒ Government
- ☐ Historic
- ☐ School

Evaluation

Investigate the building for the conditions below and check the appropriate column. There is room on the second page for a sketch.

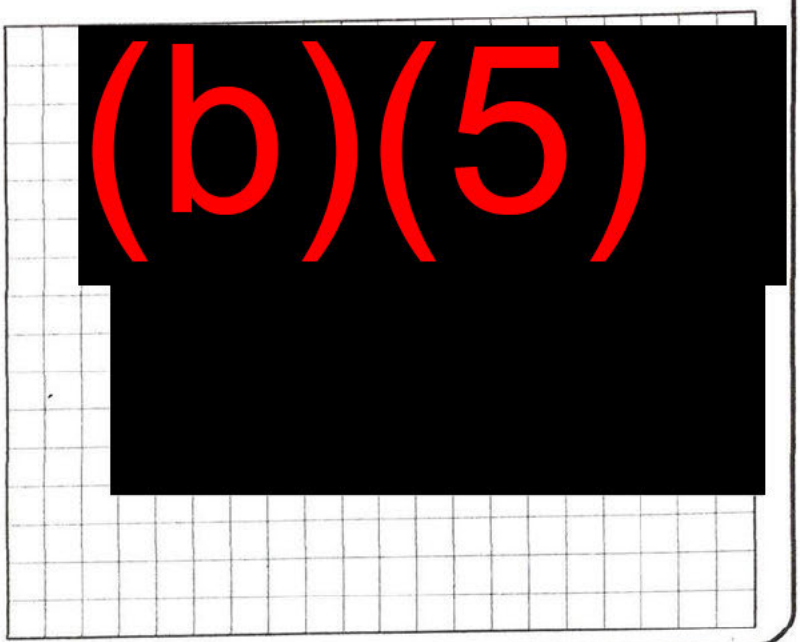
	Minor/None	Moderate	Severe	Comments
Overall hazards:				
Collapse or partial collapse	☒	☐	☐	
Building or story leaning	☒	☐	☐	
Other _____	☐	☐	☐	
Structural hazards:				
Foundations	☒	☐	☐	
Roofs, floors (vertical loads)	☒	☐	☐	
Columns, pilasters, corbels	☒	☐	☐	
Diaphragms, horizontal bracing	☒	☐	☐	
Walls, vertical bracing	☒	☐	☐	
Precast connections	☒	☐	☐	
Other _____	☐	☐	☐	
Nonstructural hazards:				
Parapets, ornamentation	☒	☐	☐	
Cladding, glazing	☒	☐	☐	
Ceilings, light fixtures	☒	☐	☐	
Interior walls, partitions	☒	☐	☐	
Elevators	☒	☐	☐	
Stairs, exits	☒	☐	☐	
Electric, gas	☒	☐	☐	
Other _____	☐	☐	☐	
Geotechnical hazards:				
Slope failure, debris	☒	☐	☐	
Ground movement, fissures	☒	☐	☐	
Other _____	☐	☐	☐	

General Comments: _____

Continue on page 2

Building name: RUIZ HAZARD BLDG Inspector ID: ARTURO BEALE P.E. (b) (6)

Sketch (optional)
Provide a sketch of the building or damaged portions. Indicate damage points.



Estimated Building Damage
If requested by the jurisdiction, estimate building damage (repair cost ÷ replacement cost, excluding contents).

- [x] None
- [ ] 0–1%
- [ ] 1–10%
- [ ] 10–30%
- [ ] 30–60%
- [ ] 60–100%
- [ ] 100%

Posting
If there is an existing posting from a previous evaluation, check the appropriate box. ARTURO BEALE

Previous posting: [x] INSPECTED [ ] RESTRICTED USE [ ] UNSAFE Inspector ID: (b) Date: 1/14/20

If necessary, revise the posting based on the new evaluation and team judgment. *Severe* conditions endangering the overall building are grounds for an Unsafe posting. Local *Severe* and overall *Moderate* conditions may allow a Restricted Use posting. Indicate the current posting below and at the top of page one.

[x] **INSPECTED** (Green placard) [ ] **RESTRICTED USE** (Yellow placard) [ ] **UNSAFE** (Red placard)

Record any use and entry restrictions exactly as written on placard: _____

Further Actions Check the boxes below only if further actions are needed.

- [ ] Barricades needed in the following areas: _____
- [ ] Engineering Evaluation recommended: [ ] Structural [ ] Geotechnical [ ] Other: _____
- [ ] Other recommendations: _____

Comments: _____

M A N U E L A. V I D A L, MCE, ECE, PE
CONSULTING ENGINEER

(b) (6) [redacted]

January 16, 2020

Jeannette Rullán, Architect
Jeannette Rullan <(b) (6) [redacted]

Re: Federico Degetau and Ruiz Nazario Buildings,
Hato Rey, Puerto Rico
Earthquake Assessment Visit on Tuesday Jan. 14, 2020

Dear Jeannette:

This is a summary, from my perspective, of what went on, on that visit.

Present, besides myself: Mr. William Earl, GSA Public Buildings Services
Mr. Arturo Beale, Structural Consultant
Mr. Pablo Beale, Associate with Mr. Arturo Beale

We met from 8:00 AM to 2:45 PM and accomplished the following:

1. Perimeter exterior ocular inspection of both buildings.
2. Inspection of roof area in the Federico Degetau building.
3. Inspection of stair and elevator cores at various levels in the Degetau building.
4. Inspection of machine and equipment rooms in both buildings.
5. Inspection of walls and beams at various levels their interior in both buildings.

Please be advised that upon the ocular inspection in reference, we agreed that there is no evidence that the structural integrity of these buildings was affected by the January 7Th earthquakes and aftershocks.

Both buildings were designed, according to the date I saw on the structural drawings, in 1969, thus the design is not up to code. Nevertheless, due to the structural system used, it is still a very robust building due to its inherent redundancy.

The Degetau building is basically a rectangular shaped one, 8 stories high, including the basement and its structural system consists of (b)(5) [redacted].

The Ruiz Nazario building is a two story structure including the basement, and its structural system consists also (b)(5) [redacted]

If a seismic retrofit for these two structures in the future is envisined, for the Degetau building in particular, special attention should be given to (b)(5) [redacted] Present codes advocate for a "strong column" connection.

Should you you have any questions regarding this issue please don't hesitate to call me.

Sincerely,

(b) (6) [redacted]

Manuel A. Vidal

(b) (6) [redacted]